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INTRAUTERINE DEVICE MIGRATION: A CASE REPORT OF TWO

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ABSTRACT

Migration of an intrauterine device (IUD) is a rare complication. We report two cases of IUD migration. The first one, 23 years old, who, following the insertion of an IUD after a delay of 24 days, presented acute pelvic pain of increasing intensity with yellowish leucorrhoea. And the 2nd 29-year-old, who had been wearing an IUD for 4 years, presented with irritative urinary symptoms associated with pelvic pain. The diagnosis was then evoked by ultrasound,then confirmed by an X-ray of the abdomen without preparation (ASP) and then a coagulation test. The diagnosis was evoked by ultrasound, confirmed by an X-ray of the abdomen without preparation (ASP) and then a laparoscopy was performed. Treatment consisted of endoscopic removal of the IUD. This case shows the importance of rigor during IUD insertionand of regularly monitoring its location to reduce the incidence of uterine perforations and ectopic migrations.

KEYWORDS: intrauterine device, intra pelvic migration, uterine perforation, intravesical migration.

INTRODUCTION

The intrauterine device (IUD) is one of the most effective contraceptive methods. It is the most widely used method of contraception worldwide. Insertion is simple, but complications such as infection, expulsion, or perforation and migration can occur, mainly when the rules for use are not followed correctly.[1] Ectopic migration is one of the complications of intrauterine devices. Its incidence is estimated in the literature to be between 1/10,000 insertions and 1/350 insertions.[2] In the majority of cases, the IUD migrates into the abdominal cavity. More rarely, it is to the pelvic organs. In the case of pelvic migration, the bladder is most frequently affected.[4] We report two new cases of intra-pelvic migration of

an IUD, in which we are interested in the circumstances in which these perforations occurand the place of ultrasound in the monitoring of patients with an IUD. The management of intra-abdominal IUDs was reviewed in the light of our two cases.

CLINICAL CASE 1

A 23-year-old female patient, GIPI (having given birth vaginally), with no particular pathological or infectious history, presented 20 days after insertion of the intrauterine device with pelvic pain of increasing intensity with fetid yellowish leucorrhoea without pollakiuria or urinary burning. The clinical examination was unremarkable and the speculumexamination did not find the IUD wire. Ultrasound showed a thin vacuity line and no IUD in the uterus or in the thickness of the myometrium (Fig. 1). The uterus and ovaries were of normal size and structure.

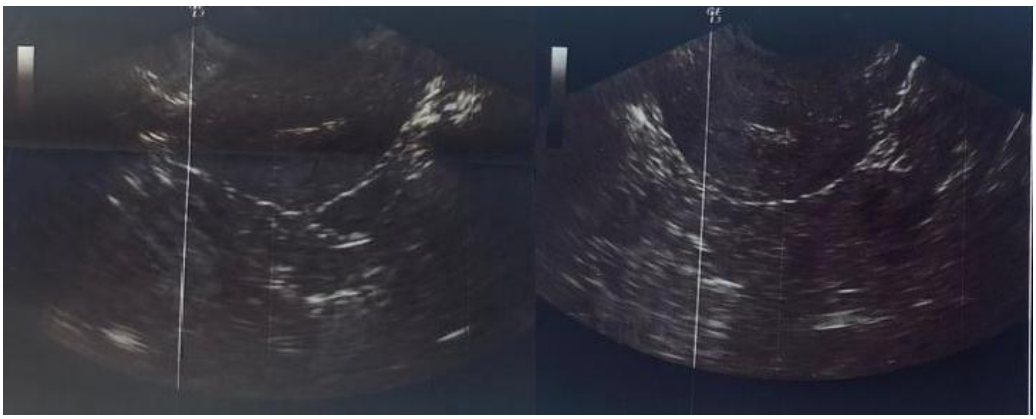

Figure 1: Ultrasound showed a thin vacuity line and no IUD in the uterus or in the thickness of the myometrium.

Radiological exploration by ASP was carried out, effectively showing migration of the IUD into the peritoneum.

Figure 2: On the x-ray ASP, visualization of the IUD in the pelvic area.

The diagnosis of a secondary perforation of the uterus and migration of the IUD into the peritoneal cavity was accepted, and the patient underwent laparoscopy for removal of the migrating IUD. The exploration allowed visualization of the IUD in the retrouterine space, attached to and hidden by the omentum (Figure 3). The IUD was removed after careful release of the adhesions. The postoperative course was unremarkable.

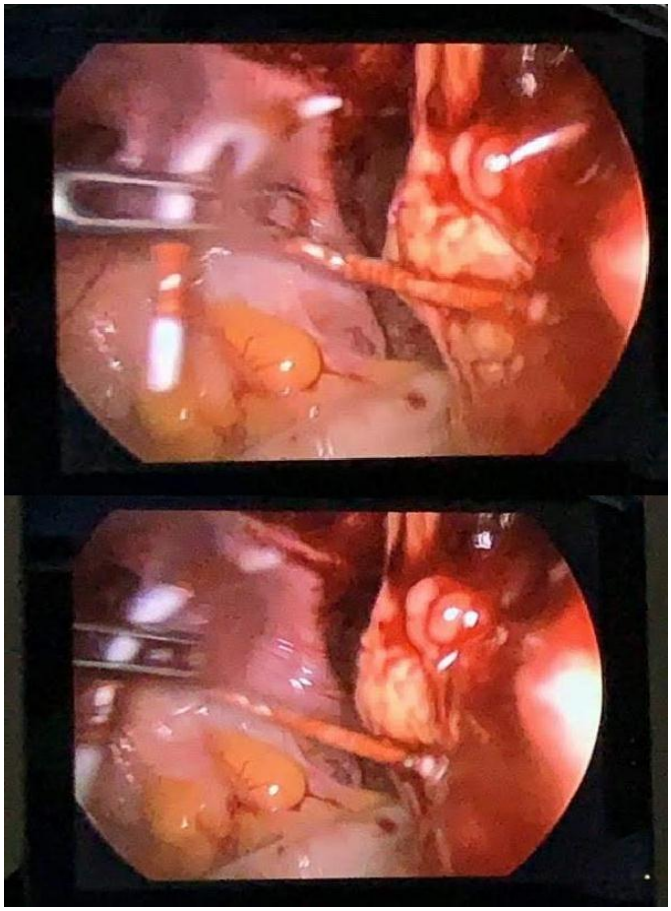

Figure 3: After release of adhesions. Removal of the IUD which was attached to the omentum in the retro-uterine area.

CLINICAL CASE 2

Mrs. H.S., 29 years old, III gesture III pare, with no notable pathological history, having had her two deliveries by the upper route. Six months after her last delivery, the patient had a copper IUD inserted in a health center. The patient never visited for a checkup until 4 years after the insertion. The clinical examination on the day of her visit did not allow visualization of the IUD wires, so the patient was referred to us for management. Clinically, the patient presented with FIG pain. The clinical examination was unremarkable and did not reveal any intravaginal IUD threads. The endovaginal ultrasound showed the IUD in an ectopic position above and to the left latero-uterine deforming the posterior wall of the bladder, with

thickening at this level. The uterus was of normal size and structure with no focal lesions, concluding that the IUD had migrated with contact and inflammation of the bladder wall (fig. 4).

Figure 4: IUD in an ectopic position above and below the left uterus deforming the posterior wall of the bladder, with thickening at this level. The uterus is of normal size and structure with no focal lesions.

IUD migration with contact and inflammation of the bladder wall. The unprepared X-ray showed the presence of the IUD on the left pelvic area (fig.5)

Figure 5: Unprepared X-ray: presence of the IUD on the left pelvic area.

Laparoscopic exploration revealed intestinal-parietal and epiploic adhesions which were gently released, thus allowing visualization of the migrating IUD covered by the peritoneum, and the omentum attached to the left lateral uterine wall opposite the uterine horn (Figure 6). The IUD was removed without difficulty and the postoperative course was simple.

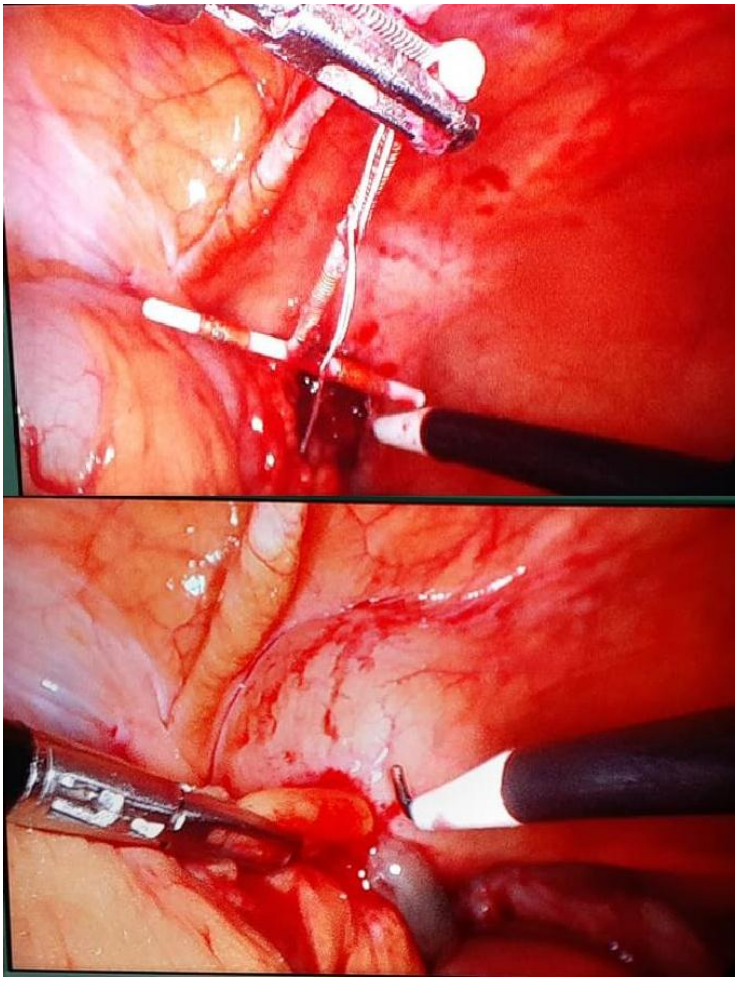

Figure 6: Laparoscopic exploration. Release of adhesions and removal of the IUD.

Laparoscopic exploration revealed intestinal-parietal and epiploic adhesions which were gently released, thus allowing visualization of the migrating IUD covered by the peritoneum, and the omentum attached to the left lateral uterine wall opposite the uterine horn (Figure 6). The IUD was removed without difficulty and the postoperative course was simple.

DISCUSSION

The intrauterine device is a contraceptive method that uses a local mechanical process. Currently, several types of IUDs are available, bioactive IUDs, which are the most widely used because of their better tolerance, and inert IUDs, which are no longer used.[2] The practitioner must master the insertion technique because in certain situations, this insertion can be followed by significant complications[2], especially if the patient is not monitored regularly, as in the case of our patients. Among these complications, gynaecological infections come to the fore[4], followed by uterine perforations, the incidence of which is rare and does not exceed 1.3 per 1000 insertions, according to large clinical trials reported.[5]

These perforations may be partial, when only part of the IUD pierces the uterine wall or cervix, or complete, when the IUD passes through the uterine wall into the abdominal cavity.[6] They may be immediate during IUD insertion or delayed by progressive erosion of the uterine wall, linked to the inflammatory process of the IUD. Post-abortal insertion, but also post-partum insertion, is one of the factors favoring migration, as are multiparity, scarred uterus, uterine malposition, uterine tuberculosis, and operator inexperience or clumsiness.[7] It therefore seems important after insertion of an IUD to check that it is properly deployed and correctly positioned by a follow-up ultrasound. Clinical symptomatology varies according to the site of migration and the type of IUD; in our second case, a copper IUD embedded in the left uterine horn caused no inflammatory or other reactions, and remained pauci-symptomatic for three years, This is consistent with the findings in the literature, since 85% of reported cases of perforation did not cause complications and were asymptomatic at the time of diagnosis, whereas 15% presented with serious complications of visceral perforation with an IUD partially or completely eroding the bladder, small bowel, appendix, colon, or rectum Recto-uterine fistula and rectal stricture have also been reported.[8] In the case of an IUD in an ectopic position, the appearance of clinical symptoms such as abdominal pain, diarrhea, fever, or urinary tract infections should alert the clinician to the possibility of perforation to the possibility of an intestinal perforation. The diagnosis of perforation of a hollow organ can also be made in the presence of complications such as an occlusive syndrome or peritonitis. Thus, uterine perforation by IUD is usually asymptomatic. Except when it occurs at the same time as insertion, causing severe pain, which points to the diagnosis. On examination, perforation is suspected when the marker wires disappear, after checking that the wires have not gone back into the endocervix, as in the case of our two patients.[8]

Nevertheless, the clinical diagnosis is not always obvious, and additional explorations must be carried out to locate the device. The means for locating a migrating IUD will be ultrasound, and then, if this fails, an unprepared abdominal X-ray to look for it in the abdomen before concluding that it has been expelled without being recognized. The CT scan or magnetic resonance imaging will locate it precisely. When there is migration, the IUD may be located in the cul de sac of Douglas, the broad ligament and the omentum (45%).[9] digestive locations (such as the mesentery and colon) and the bladder are less frequent.[7] The majority of authors believe that removal of the migratory IUD is essential given the risk of digestive complications. Removal of the intra-abdominal IUD is most often done by laparoscopy. In the literature, the success rate varies between 44 and 100%[3], depending on

the number of cases treated, the location of the IUD, and the experience of the operator. The need for a laparotomy is not exceptional.[9] It is therefore essential to warn the patients of the risk of laparoconversion, but also of digestive resection. In case of intraoperative difficulty in locating the IUD, radioscopy may be useful. The Trendelenburg position is not recommended by some authors in the case of laparoscopy because of the possibility of secondary migration of the IUD.[10]

CONCLUSION

The IUD is an effective contraceptive method, and its insertion is a simple medical act that requires a minimum of knowledge and experience. Perforation associated with intraperitoneal migration is one of the rarest and most formidable complications.

Laparoscopic or even laparotomic removal of the IUD is essential for fear of perforation and peritonitis.

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